

Technical Services facts

Precision Machining and Fabrication

The White Sands Test Facility (WSTF) maintains a fully integrated 18,000 ft² (1700 m²) fabrication facility. A staff of experienced machinists and welders is complemented by computer-assisted design services.

Equipment

- Conventional shop equipment, including nine lathes and six mills
- Computer Numerical Control (CNC) capability, including three turning centers (lathes) and four machining centers (mills) and an Electrical Discharge Machine (EDM)
- Shop PRO CAD/CAM interface between CNC machines and personal computers
- Welding machines, including four shop machines, five portable machines (two tungsten inert gas), plasma cutter, arc, two metal inert gas

Capabilities

- Conventional and computer-aided machining, including turning up to 26 in. (66 cm), milling up to 40 in. (100 cm), drilling, boring, and reaming
- In-shop calibration program with control and inspection by certified quality assurance personnel
- Certified in-shop welding processes covering most ferrous and nonferrous applications, including carbon steel, stainless steel, Inconel®, Monel®, bimetallic, and aluminum
- In-shop CWI inspection capabilities
- ASME code equivalent fabrication
- ISO 9001 certified and AS 9100 compliant
- Precision sheet metal capabilities
- Wide variety of certified materials in stock

Innovative Problem-solving Skills

- Custom-made Well-Sampling Retrieval Tools
- Emergency Bolt Extraction for Orion Launch Abort System Lifting Harness

